



# **Phase I Environmental Site Assessment Report**

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COMMITMENT & INTEGRITY DRIVE RESULTS

**Boston DND**  
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## EXECUTIVE SUMMARY

Woodard & Curran Inc. (Woodard & Curran) was retained by the City of Boston Department of Neighborhood Development (DND) (the "Client") to conduct a Phase I Environmental Site Assessment (Phase I ESA) of 65 East Cottage Street in Boston (Dorchester), Massachusetts (the "subject property"). This Phase I ESA was requested to evaluate potential environmental liabilities associated with the subject property.

Woodard & Curran conducted the Phase I ESA in general accordance with the ASTM "Standard Practice for Environmental Site Assessments E 1527-13" and the United States Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) rule (40 CFR Part 312). Woodard & Curran evaluated the subject property for evidence of the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of release into structures, soils, groundwater, surface water, or sediments on the subject property. These conditions are referred to in this report as Recognized Environmental Conditions (RECs). The Phase I ESA included a site walkover, historical research, and a review of applicable local, state, and federal environmental records.

The subject property consists of a 2.76-acre parcel of land located on the south side of East Cottage Street in Dorchester, Massachusetts. The subject property is presently developed with a multi-story, approximately 50,000-square foot, commercial style building. Based on information from historical research sources, the subject property building was constructed between 1899 and 1920 and has been occupied by various businesses, including bakeries and a box company. Historical information suggests that industrial tenants have also occupied the building.

The City of Boston currently owns the subject property which was obtained thru tax foreclosure. The building on the subject property is currently vacant and demolition of the building is planned.

Storage and use of hazardous substances and/or petroleum products has occurred at the subject property. City Archives information suggests that four USTs were permitted at the subject property between 1915 and 1966. This included a 300-gallon gasoline UST, 1,000-gallon gasoline UST, 9,000-gallon gasoline UST and a 10,000-gallon fuel oil UST. Other small amounts of gasoline and acetylene were also permitted for storage on the subject property.

According to a previous Environmental Site Assessment Report prepared by Cistar Associates in August 1993, three USTs (one 10,000-gallon fuel oil, one 1,000-gallon diesel, and one 10,000-gallon diesel) were present on the property. In addition, three exterior transformers, several 275-gallon ASTs, and about twenty 55-gallon drums for storage of oil, waste oil, antifreeze, and hydraulic oil were also present at the time. Floor drains were observed inside the building. A Site Plan prepared by Cistar Associates, Inc. also identified a fuel pump associated with the diesel USTs.

In October 1994, three USTs (two 10,000-gallon #2 fuel oil USTs and one 1,000-gallon diesel fuel UST) were removed from the property according to Boston Fire Department records. Subsurface contamination was identified. The Massachusetts Department of Environmental Protection (MassDEP) was informed of a release of petroleum to the subsurface on October 28, 1994 and assigned Release Tracking Number (RTN) 3-11782 to the release. An Immediate Response Action (IRA) was initiated and about 75 cubic yards of soil was excavated for off-site disposal. A Class A-2 Response Action Outcome (RAO) Statement was submitted to MassDEP in February 1995 to achieve site closure. The subject property is also listed by MassDEP as a closed Spill Site for the release of magnesium in 1987.

At the time of the September 10, 2014 site reconnaissance performed in support of this Phase I ESA, one approximately 300-gallon aboveground storage tank (AST) and three 55-gallon drums (one empty, one containing trash, and one containing a small quantity of liquid) were observed inside the building. No other evidence of storage

or use of oil and/or hazardous materials was observed during an evaluation of the property. Oil leakage was observed from the AST. However, secondary containment on top of the concrete slab floor was present.

Oil and/or hazardous material releases have been reported on nearby properties in addition to 65 East Cottage Street. However, based on distance, location, and/or regulatory status of these nearby sites, the environmental integrity of the subject property is not expected to be significantly impacted by these other sites.

Woodard & Curran has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-13 of 65 East Cottage Street in Boston, Massachusetts. Any exceptions to, or deletions from, this practice are described in Sections 1.4 and 9 of this report. This assessment identified:

- The previously identified release of petroleum on the subject property is a historical REC because the release has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority; and
- No evidence of RECs other than the historical REC described above in connection with the current and historical use of subject property, based on documents reviewed for this ESA.

Similar to other urban properties, fill material in the subsurface at the subject property likely contains coal, ash, and cinders which likely result in the presence of elevated concentrations of polycyclic aromatic hydrocarbons and metals in shallow soil at the subject property.

# 1. INTRODUCTION

## 1.1 PURPOSE

Woodard & Curran Inc. (Woodard & Curran) was retained by the City of Boston Department of Neighborhood Development (DND) (the "Client") to conduct a Phase I Environmental Site Assessment (Phase I ESA) of 65 East Cottage Street in Boston (Dorchester), Massachusetts (the "subject property"). This Phase I ESA was requested to evaluate potential environmental liabilities associated with the subject property.

The Phase I ESA was conducted in general accordance with the ASTM International "Standard Practice for Environmental Site Assessments E-1527-13" and the United States Environmental Protection Agency's (EPA) All Appropriate Inquiry (AAI) Final Rule (40 CFR Part 312). Good commercial and customary practice for conducting Phase I ESAs has the goal of providing an independent, professional opinion regarding Recognized Environmental Conditions (RECs), as defined by ASTM, associated with the subject property. RECs are defined as

"the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

As defined by ASTM, hazardous substance is a substance defined as hazardous pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 USC § 9601(14), and as interpreted by United States Environmental Protection Act (EPA) regulations and the courts. Petroleum products is defined as those substances included within the meaning of the petroleum exclusion to CERCLA 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of CERCLA 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

This Phase I ESA also evaluated controlled RECs and historical RECs. ASTM defines a controlled REC (CREC) as:

"A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

ASTM defines an historical REC (HREC) as

"a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

A past release that was addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority may be a REC if there has been a change in regulatory criteria since the past release achieved closure.

The conclusions of this Phase I ESA are intended to assist the Client in evaluating the business environmental risk associated with the property. ASTM defines business environmental risk as

“a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.”

## **1.2 METHODOLOGY**

This Phase I ESA was completed in general accordance with the ASTM International E 1527-13 standard, and the terms and conditions of Woodard & Curran’s proposal to the Client dated June 30, 2014. This Phase I ESA consists of four components: records review, site reconnaissance, interviews, and this report. An Environmental Professional meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b) and ASTM E 1527-13 completed the assessment and/or reviewed this document.

Woodard & Curran previously completed an environmental assessment report of the subject property in June 2010 for the DND. Portions of this report reference information obtained during completion of the June 2010 report.

### **1.2.1 Records Review**

Records reviewed included the following federal, state, tribal, and local databases as maintained by EPA and state, tribal, and local environmental regulatory agencies:

#### **Federal Databases**

- National Priorities List (NPL);
- De-listed NPL List;
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) list;
- CERCLIS No Further Remedial Action Planned (CERCLIS-NFRAP) list;
- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (RCRA-CORRACTS) list;
- RCRA Non-CORRACTS Treatment Storage and Disposal (TSD) list;
- RCRA generators list;
- Institutional Control/Engineering Control (IC/UC) registries; and
- Emergency Response Notification System (ERNS) list.

#### **State/Tribal/Local Databases**

- Hazardous Waste Sites (SHWS) or State/Tribal/Local- equivalent NPL or CERCLIS list;
- Solid Waste Facilities and Landfills (SWF/LF) list;
- Leaking Underground Storage Tanks (LUST);
- Registered Storage Tanks (AST/UST) list;
- Institutional Control/Engineering Control (IC/UC) registries;
- Voluntary Cleanup Sites (VC); and
- Brownfield sites list.



To evaluate the physical setting of the subject property, Woodard & Curran reviewed the following sources, if readily available:

- United States Geological Survey (USGS) topographic maps;
- Aerial photographs; and
- Local soil, geologic, surface water, and groundwater information.

To evaluate the current and historic use of the subject property, Woodard & Curran reviewed the following sources, if readily available:

- Current and historic topographic maps;
- Current and historic aerial photos;
- Sanborn Fire Insurance Maps;
- Street directories;
- Local records including information available from the local Building, Health, and Assessor Departments; and
- Previous environmental reports, if provided.

### **1.2.2 Site Reconnaissance**

Woodard & Curran completed a walkover of the subject property on September 10, 2014 to assess the presence or absence of RECs. The walkover included an evaluation of the following (if present):

- Hazardous substances and petroleum products;
- Underground storage tanks (USTs) and aboveground storage tanks (ASTs);
- On-site wastewater disposal systems;
- Pits, ponds, and lagoons;
- Hydraulic or electrical equipment potentially containing polychlorinated biphenyls (PCBs);
- Stressed vegetation, stained soils, or odors;
- Waste management, including solid waste, wastewater, and hazardous waste;
- Groundwater wells;
- Topography, drainage, impervious surfaces, and buildings; and
- Adjacent property characteristics visible from publicly accessible locations.

### **1.2.3 Interviews**

Woodard & Curran completed reasonable attempts to interview persons with actual or constructive knowledge of current and/or past uses of the subject property and adjacent properties. Woodard & Curran attempted to interview the following individuals and/or entities:

- Property owner or property owner representative; and
- State and/or local government officials (such as tax assessor, health agent, and conservation agent).

The subject property is currently unoccupied.

### **1.2.4 Report**

This Phase I ESA report prepared by Woodard & Curran includes documentation to support the findings, opinions, and conclusions obtained by the Environmental Professional. Deviations and additions, if any, from the approach presented in ASTM Standard E 1527-13 are listed in detail.

### 1.3 SIGNIFICANT ASSUMPTIONS

Woodard & Curran made the following assumptions:

- The information obtained from the Client, the Client's representative, individuals interviewed, and prior environmental reports, if any, was considered to be accurate.
- The information provided by the environmental records database vendor and other public record sources is complete and accurate.
- Conditions observed at the subject property were assumed to be representative of areas that were not accessible unless otherwise noted.

### 1.4 LIMITATIONS AND EXCEPTIONS

The evaluations contained in this Phase I ESA represent Woodard & Curran's professional opinions and judgments based on the current, generally accepted engineering and technical practices for the nature and scope of this Phase I and II ESA authorized by the Client. This Phase I ESA is based on the conditions observed on the dates of field observation noted and records review as described herein.

The following limitations were encountered during completion of this Phase I ESA:

- Access was not available to conduct interviews with the previous property owners/occupants.

In no event may a Third Party rely on the evaluation, conclusions, and professional opinions presented in the Phase I and II ESA Report without first obtaining the expressed written consent of Woodard & Curran. Woodard & Curran shall bear no liability for any unauthorized use of the information contained in this report. In the event that new information not contained in this report is obtained relating to environmental or hazardous waste issues at the subject property or nearby, such information shall be brought to Woodard & Curran's attention promptly and Woodard & Curran may, upon evaluation, modify the conclusions stated in this report.

Property access was granted for purposes of reconnaissance and examination of conditions at the subject property. No other physical sampling of soil, groundwater, or other materials was conducted during this Phase I ESA. Specific information on the normal practices of property owners and/or occupants with regard to solid waste disposal, on-site use, generation, storage, and/or disposal of chemicals or oil and hazardous materials was strictly obtained through review of previous environmental reports and interviews. Additionally, Woodard & Curran has relied on information provided by various officials and other parties as referenced herein. Although believed to be accurate, Woodard & Curran has not attempted to independently verify the accuracy or completeness of information provided by officials and other parties, which was received or reviewed during the course of completing these services.

ASTM E 1527-13 recognizes inherent limitations for Phase I ESAs including:

- Uncertainty Not Eliminated – No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with the subject property;
- Not Exhaustive – All appropriate inquiry does not mean exhaustive assessment of a clean property; and
- Level of Inquiry is Variable – Not every property will warrant the same level of assessment. The level of inquiry will depend on the type of property, the user's risk tolerance, and information obtained during the inquiry.

As indicated in the ASTM Standard, there are additional potential environmental issues that are outside of the scope of the ASTM Phase I practice, including asbestos-containing building materials, biological agents, cultural and

historic risks, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead based paint, lead in drinking water, mold, radon, regulatory compliance, and wetlands (E 1527-13). These items were not included in this Phase I ESA. In addition, the determination of compliance with activity and use limitations, if present, is beyond the scope of the Phase I ESA.

## **1.5 SPECIAL TERMS AND CONDITIONS**

This Phase I ESA is subject to the terms and conditions of our proposal dated June 30, 2014, which was authorized by the Client on July 23, 2014.

## **1.6 USER RELIANCE**

This Phase I ESA report has been prepared for the exclusive use of City of Boston Department of Neighborhood Development.

## **2. SITE DESCRIPTION**

### **2.1 LOCATION AND LEGAL DESCRIPTION**

#### **2.1.1 Location**

The subject property is located south of East Cottage Street in the City of Boston (Dorchester Neighborhood), Suffolk County, Massachusetts. The current owner of the property as listed by the City of Boston Assessors is the City of Boston.

Documentation on file at the Suffolk County Registry of Deeds indicates the City of Boston acquired the property by foreclosure on February 11, 2009 (Registered Land (Land Court) Book 436, Page 126).

The subject property is surrounded by residential and commercial properties. Based on a review of the United States Geological Survey topographical map, the subject property is located at 42° 19' 15.26" N latitude, 71° 4' 3.4" W longitude and the Universal Transverse Mercator (UTM) coordinates are X: 329587.3, Y: 4687230.0. Elevation of the property is approximately 19 feet above sea level. A Site Locus Map is presented as Figure 1.

#### **2.1.2 Assessors Identification**

The subject property is identified by the City of Boston Assessors as a single parcel with the identification 0703644000. The operating address of the subject property is 65 East Cottage Street and the parcel comprises 2.76 acres. The Assessors map is presented as Figure 2.

### **2.2 SITE AND GENERAL VICINITY GENERAL CHARACTERISTICS**

East Cottage Street abuts the subject property to the north, across which are commercial properties including UniFirst (a uniform cleaning company). Hillsboro Street and residential properties abut the subject property to the southeast. Residential properties and commercial properties abut the subject property to the east. MBTA rail lines abut the subject property to the west. The extended vicinity of the subject property is characterized by a mixture of commercial and residential properties.

### **2.3 CURRENT USE OF THE SUBJECT PROPERTY**

The subject property is developed with a commercial building and adjacent asphalt paved parking areas. The building is currently vacant. An aerial photograph of the property is provided as Figure 3.

### **2.4 DESCRIPTION OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS ON THE SUBJECT PROPERTY**

The subject property is improved with a one- to two-story brick building. Based upon the Boston Assessors Map of the subject property, the commercial style building is approximately 50,000 square feet. At the time of the Site visit in September 2014, one office-style trailer to be used during the upcoming asbestos abatement project was also present on the subject property. No other outbuildings were observed. The remaining portions of the subject property are asphalt paved..

### **2.5 CURRENT USES OF ADJOINING PROPERTIES**

Adjoining/nearby properties were observed from the vantage of the subject property and/or from public access areas for indications of activities with the potential to pose an environmental concern to the subject property. The uses and features of adjoining/nearby properties are described below:

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**North:** UniFirst Corporation, across East Cottage Street.

**South:** Residential properties.

**East:** Commercial properties along East Cottage Street and residential properties along Hillsboro and Groom Streets.

**West:** MBTA railroad tracks.

### **3. USER-PROVIDED INFORMATION**

#### **3.1 TITLE RECORDS**

Woodard & Curran was not provided with title records for the subject property and was not engaged by the Client to secure a title report as part of this Phase I Environmental Site Assessment.

#### **3.2 ENVIRONMENTAL LIENS OR USE LIMITATIONS**

According to the site representative, the subject property does not have any environmental liens. An on-line review of Suffolk County Registry of Deed documents did not identify current environmental liens against the subject property.

According to a review of the Massachusetts Department of Environmental Protection (MassDEP) sites database, the subject property does not have an activity and use limitation.

#### **3.3 SPECIALIZED KNOWLEDGE**

No specialized knowledge pertaining to the subject property was provided to Woodard & Curran by the Client.

#### **3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION**

Information provided by the Site Representative is presented in Sections 5 and 6. No other commonly known or reasonably ascertainable information pertaining to the subject property was provided to Woodard & Curran.

#### **3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES**

No actual knowledge that the value of the Subject Property is significantly less than the purchase price of comparable properties has been communicated to Woodard & Curran.

#### **3.6 OWNER, PROPERTY MANAGER, OCCUPANT INFORMATION**

The subject property is currently owned by the City of Boston and currently unoccupied. Information obtained during the site walkover is presented in Section 6.

#### **3.7 REASON FOR PERFORMING PHASE I ASSESSMENT**

Woodard & Curran understands this Phase I assessment is being completed to evaluate potential environmental liabilities associated with the subject property.

## 4. RECORDS REVIEW

### 4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Woodard & Curran conducted a search of Federal, Tribal, and State of Massachusetts environmental databases to obtain any listed information concerning the subject property, or within a specified radius of the subject property, as recommended by the ASTM Standard. In addition, state or local supplemental ASTM databases were searched. This database search was conducted through Environmental Data Resources, Incorporated (EDR). The EDR report, which identifies all standard and supplemental state or local ASTM databases reviewed, is provided in Appendix B.

A summary of the standard record sources listed in the ASTM Standard is provided in the following table:

Environmental Record Source	Report Section	Subject property Listed?	Nearby Properties Listed?
Federal NPL	4.1.1.1	No	No
Federal Delisted NPL	4.1.1.2	No	No
Federal CERCLIS	4.1.1.3	No	No
Federal CERCLIS NFRAP	4.1.1.4	No	YES
Federal RCRA CORRACTS	4.1.1.5	No	No
Federal RCRA TSD	4.1.1.6	No	No
Federal RCRA Generators	4.1.1.7	No	YES
Federal Institutional Control	4.1.1.8	No	No
ERNS	4.1.1.9	No	YES
State Hazardous Waste Sites (state-equivalent NPL and CERCLIS)	4.1.2.1	YES	YES
State Landfill	4.1.2.2	No	No
State Leaking Storage Tanks	4.1.2.3	YES	YES
State Registered Tanks	4.1.2.4	No	YES
State Institutional Controls	4.1.2.5	No	YES
State Voluntary Cleanup	4.1.2.6	No	No
State Brownfields	4.1.2.7	No	YES
Tribal Databases	4.1.3	No	No
Other	4.1.4	YES	No

In addition to these standard record sources, Woodard & Curran evaluated both supplemental Federal and State databases as well as databases developed by EDR. The subject property was listed in supplemental records as described in Section 4.1.4.

#### 4.1.1 Federal Records Review

##### 4.1.1.1 National Priority List (NPL)

The National Priorities List (NPL) database is a list of known releases associated with abandoned hazardous waste or contamination sites that have been identified for priority remedial actions under the Federal Superfund Program established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

The subject property was not identified in the NPL database, nor was any NPL site identified within a 1-mile radius of the subject property.

#### **4.1.1.2 Delisted NPL**

The Delisted National Priorities List (NPL) database is a list of sites removed from the NPL list.

The subject property was not identified in the Delisted NPL database, nor was any delisted NPL site identified within a 1-mile radius of the subject property.

#### **4.1.1.3 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)**

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database is a list of potentially contaminated sites brought to the attention of EPA that are suspected or confirmed to have adversely impacted the environment. The CERCLIS database contains sites that are in the EPA screening and assessment process phase (also referred to as a Preliminary Assessment).

The subject property was not identified as a CERCLIS site, nor was any CERCLIS site identified within a 0.5-mile radius of the subject property.

#### **4.1.1.4 CERCLIS No Further Remedial Action Planned Sites**

The CERCLIS No Further Remedial Action Planned (NFRAP) database is a list of CERCLIS sites deemed to not require Federal Superfund action following the EPA screening and assessment process. This status does not necessarily mean no hazards are present at the site.

The subject property was not identified as a CERCLIS NFRAP site. One NFRAP site, 131 East Cottage Street, was identified within a 0.5-mile radius of the subject property. The database report indicates that EPA classified this site was a "Removal Only Site" and no site assessment work was needed.

Based on the regulatory status of the 131 East Cottage Street NFRAP site, it is unlikely to pose a threat to the environmental integrity of the subject property.

#### **4.1.1.5 Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)**

The Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) database is a list of hazardous waste sites/handlers identified as having a RCRA violation and subject to RCRA corrective actions.

The subject property was not identified as a CORRACTS site, nor was any CORRACTS site identified within a 1-mile radius of the subject property.

#### **4.1.1.6 RCRA Treatment Storage Disposal (TSD) Facility**

The RCRA Treatment Storage Disposal (TSD) Facility database is a list of sites, which treat, store, and/or dispose of hazardous waste.

The subject property was not identified as a TSD site, nor was any TSD site identified within a 0.5-mile radius of the subject property.

#### **4.1.1.7 RCRA Large, Small, and Conditionally Exempt Small Quantity Hazardous Waste Generators**

The RCRA Large Quantity Hazardous Waste Generator (LQG), Small Quantity Hazardous Waste Generators (SQG), and Conditionally Exempt Small Quantity Generators (CESQG) databases are lists of sites, which generate and/or transport hazardous waste.



The subject property was not identified as a RCRA Generator site. Two RCRA Generator Sites (UniFirst Corp at 78 to 80 East Cottage Street (a SQG) and Cottage Cleaners at 553 Dudley Street (a CESQG)) were identified within a 0.25-mile radius of the subject property. No RCRA violations were listed for UniFirst Corporation. Violations were listed for Cottage Cleaners in 2007 and compliance was subsequently achieved.

Based on the regulatory status of these RCRA sites, they are unlikely to pose a threat to the environmental integrity of the subject property.

#### **4.1.1.8 Federal Institutional Control/Engineering Control Registry**

The Federal Sites with Institutional Control and Federal Engineering Controls Site List are databases maintained by EPA. The databases contain sites with either institutional or engineering controls in place.

The subject property was not identified in the Institutional Control and Federal Engineering Controls Site database, nor was any nearby property identified within the search radius.

#### **4.1.1.9 Emergency Response Notification System (ERNS)**

The Emergency Response Notification System (ERNS) database is a list of reported releases of oil and hazardous materials. The database contains information from spill and emergency response reports prepared by the National Response Center, Department of Transportation, EPA, and the U.S. Coast Guard.

The subject property was not identified in the ERNS database.

### **4.1.2 State Records Review**

#### **4.1.2.1 State Hazardous Waste Sites**

The Massachusetts Department of Environmental Protection (MassDEP) maintains a sites database that lists all reportable releases as defined by the Massachusetts Contingency Plan (MCP). The EDR database identifies MCP reportable releases in three databases: the State Hazardous Waste Sites (SHWS), the Releases list, and the former Spills list.

The SHWS database identified 270 sites within a one-mile radius of the subject property. These sites are assigned unique Release Tracking Numbers (RTN) within the MassDEP database, which references the releases of OHM.

The ASTM standard indicates review of regulatory files associated with either the subject property or adjoining properties is necessary to evaluate the presence of RECs. Information regarding the 65 East Cottage Street subject property and adjoining properties is summarized below.

#### **65 East Cottage Street (Subject Property)**

The subject property is identified as a Release Site and former Spills list. Additionally, the subject property was also identified as a Leaking Underground Storage Tank (LUST) site. The LUST list includes sites in the MassDEP release database that have a UST identified as the source. Based upon the information within the EDR report, the Release Tracking Number (RTN) assigned to the Release and LUST listing is 3-11782.

A review of MassDEP Bureau of Waste Site Cleanup (BWSC) electronic files was completed for RTN 3-11782. A Response Action Outcome (RAO) Statement and Immediate Response Action (IRA) Completion Report were reviewed. The RAO Statement and IRA Completion Report, dated February 1, 1995, was prepared by Rizzo Associates Inc. of Natick, Massachusetts and submitted to MassDEP on February 27, 1995. According to the report,

soil impacted by #2 fuel oil and/or gasoline was discovered during the removal of a 10,000-gallon UST in the northwest portion of the property (see Figure 4). In October 1994, three USTs, including the 10,000-gallon UST, a second 10,000-gallon UST, and a 1,000-gallon diesel UST were removed. The location of the UST associated with the release, the two other former USTs removed from the property, and fuel pumps apparently used to dispense diesel fuel formerly contained in the USTs are shown on Figure 4.

The release was reported to the MassDEP on October 28, 1994. Vazza Associates, Inc., the court-appointed receiver of the subject property, initiated the IRA activities upon MassDEP approval. Response actions completed during the IRA activities included the removal of the UST and the excavation of 111.8 tons of impacted soil (approximately 75 cubic yards) from the former tank location. Excavated soil was transported to American Reclamation Corporation of Charlton, Massachusetts under a Massachusetts Bill of Lading. Post excavation composite samples were collected and submitted for laboratory total petroleum hydrocarbon (TPH) analysis. Residual concentrations of TPH were not detected in the post excavation soil samples.

Four groundwater monitoring wells present at the subject property were sampled by Rizzo Associates in order to evaluate the release. These groundwater monitoring wells were installed in the 1980's according to information reported by Cistar Associates (see Section 5). The samples were collected in November and December 2004 and submitted for laboratory TPH and volatile organic hydrocarbon (VOC) analysis. Chloroform, a VOC, was detected in groundwater collected from the monitoring wells identified as D-2 (2.8 ug/L) and D-3 (4.6 ug/L) that were situated east of the release location, along the eastern property boundary. These chloroform concentrations are well below the applicable MCP risk-based GW-3 criteria of 20,000 ug/L. Other TPH and VOC concentrations were not detected in groundwater. Based upon these results, a Class A-2 RAO Statement was submitted on February 1, 1995 indicating that a permanent solution was achieved; however, levels of oil and hazardous materials have not been reduced to background but do not pose a risk that would require an activity and use limitation for the subject property.

Additionally, the subject property is also listed by MassDEP as a Spill Site (Spill ID: N87-0902). Based upon the information available within the EDR report, an unknown amount of magnesium was spilled at the subject property on July 6, 1987. The Spill case was closed within one day. In April 2010, Woodard & Curran contacted the Northeast Regional Office of MassDEP regarding this Spill listing. No additional information was obtained from MassDEP regarding this spill.

### **Parcels at Intersection of Harrow, Beckwith, and Hillsboro Street**

A release of petroleum was detected at these parcels in September 2001 and reported to MassDEP as a 120-day reportable condition (RTN 3-21074). This release location is located directly southeast of the subject property. An ESA conducted at the undeveloped parcels in 2001 detected extractable petroleum hydrocarbons in soil. The parcels were undeveloped and vacant. A Class B-1 RAO Statement with a Method 1 Risk Characterization was filed achieving regulatory closure for this release on July 16, 2002.

### **78 to 80 East Cottage Street (UniFirst Corporation)**

The UniFirst Corporation is located directly north of the subject property across East Cottage Street. This property is identified within the RCRA database as a Small Quantity RCRA Generator of spent solvent mixtures, the State database as a reportable release Site (RTNs 3-1373, 3-14550, 3-18606, and 3-1573; Response Action Outcomes Submitted), and as a State Spills Site (Spill IDs: N84-0753 and N84-0722; Closed). Based on a review of the database records, the response actions reported at 78 to 80 East Cottage Street have addressed petroleum releases. Groundwater elevation measurements reported in the Phase I Initial Site Investigation and Tier Classification Submittal, dated August 1, 1996, prepared by Handex, indicated groundwater flowed to the northeast. Therefore, this property is hydraulically downgradient of 65 East Cottage (the subject property).

### **83 East Cottage Street (also referred to as 83 to 89 East Cottage Street)**

83 East Cottage Street, located to the east of the subject property, is identified within the State database for multiple reportable release Sites (RTNs 3-22464, 3-0592, and 3-15411; Response Action Outcomes Submitted) and as a State Spills Site (Spill ID: N86-0353; Closed). Releases on this property have been petroleum and mineral oil related. Groundwater apparently flows to the northeast. Therefore, this property is hydraulically cross gradient of 65 East Cottage (the subject property).

In April 2012, a Downgradient Property Status (DPS) Opinion was filed for RTN 3-15411 contending that releases at 11 Humphreys Street (RTN 3-14544) migrated onto the 83 to 89 East Cottage Street property.

### **11 Humphreys Street (Former Daloz Cleaners)**

11 Humphreys Street, located to the east of the subject property south of the intersection of East Cottage Street and Humphreys Street, is identified within the State database for multiple reportable release Sites (RTNs 3-14544, 3-22779, 3-22780, 3-28631). Releases of both petroleum and chlorinated solvents have been identified on the property. Response actions are on-going. The groundwater flow direction at this property has been determined to be east northeast (Phase IV Final Inspection Report and Remedy Operation Status, RTN 3-14544, October 2006, prepared by GZA GeoEnvironmental). Therefore, this property is hydraulically cross gradient of 65 East Cottage (the subject property).

Based on the information presented above, the sites listed above have reached regulatory closure with a Response Action Outcome Statement, are adequately regulated, or are located at a lower elevation and likely hydraulically downgradient of the subject property. Based on the regulatory status and/or their location relative to the subject property, these nearby release sites are unlikely to pose a threat to the environmental integrity of the subject property.

#### **4.1.2.2 State Landfill and/or Solid Waste Disposal Sites**

The landfill and solid waste disposal sites database is a registry of permitted solid waste disposal facilities or landfills.

According to the EDR database, the subject property was not identified in the landfill database, nor was any landfill or solid waste disposal site identified within a 0.5-mile radius of the subject property.

#### **4.1.2.3 State Leaking Storage Tank Lists**

The Leaking Aboveground Storage Tank (LAST) list and Leaking Underground Storage Tank (LUST) list include sites in the MassDEP release database that have either an AST or UST identified as the source.

The subject property was identified as a LUST site (see Section 4.1.2.1 and Section 5). Four LUST sites are located within 0.25 miles of the subject property:

- Dudley and Magnolia Street (RAO achieved),
- 83 to 89 East Cottage Street (see Section 4.1.2.1);
- 11 – 13 Humphreys Street (see Section 4.1.2.1); and
- 262 – 264 Norfolk Street (RAO achieved).

The subject property was not identified as a LAST site. Two LAST sites are located within 0.25 miles of the subject property:

- 41 Humphreys Street (RAO achieved); and
- 78 to 80 East Cottage Street (UniFirst Corp; see Section 4.1.2.1).

Based on the information presented above, the sites listed above have reached regulatory closure with a Response Action Outcome Statement or are located at a lower elevation and likely hydraulically downgradient of the subject property. Based on the regulatory status and/or their location relative to the subject property, these nearby release sites are unlikely to pose a threat to the environmental integrity of the subject property.

#### **4.1.2.4 State Registered Storage Tank Lists**

Registered storage tank lists are databases of USTs and ASTs that are required to be registered with the state. Registered USTs are regulated under Subtitle I of RCRA, and are registered with the Massachusetts Fire Marshall. Some USTs and ASTs may not be registered due to use and size measures within the applicable state regulations.

There are no registered USTs listed for the subject property. There is one registered UST site (Dorey Fuel Co. at 262 Norfolk Avenue) within a 0.25-mile radius of the subject property. This registered UST site is about 0.23 miles north of the subject property.

There are no registered ASTs listed for the subject property nor within a 0.25-mile radius.

#### **4.1.2.5 State Institutional Control/Engineering Control Registry**

The Institutional Control and Engineering Control Registry lists sites with Activity and Use Limitations (AUL).

The subject property was not identified in the Institutional Control database. Ten AUL sites were identified within a 0.5-mile radius of the subject property. All AUL sites have achieved regulatory closure via a Response Action Outcome Statement. None of the AUL sites abut the subject property.

Based on the regulatory status and/or their location relative to the subject property, these nearby AUL sites are unlikely to pose a threat to the environmental integrity of the subject property.

#### **4.1.2.6 Voluntary Cleanup Sites**

The State of Massachusetts does not maintain a database identified as voluntary cleanup sites. Sites with reportable releases are identified in the Releases database (Section 4.1.2.1).

#### **4.1.2.7 Brownfield Sites**

The State of Massachusetts does not maintain a database identified as Brownfield sites. Sites with reportable releases are identified in the Releases database (Section 4.1.2.1).

Thirty-one properties, including the subject property, were listed in the U.S. Brownfields database as located within 0.5 miles of the subject property.

### **4.1.3 Tribal Records Review**

Tribal databases identify land listed as Indian land and sites within the Indian land. The subject property is not located within a one-mile radius of designated tribal land. The subject property and surrounding properties are not identified in any tribal databases.

#### **4.1.4 Supplemental Records Review**

The EDR Report identifies supplemental federal, state, and/or tribal databases, which are beyond the standard environmental record sources specified in ASTM E 1527-05. These databases are listed within the EDR Report.

The subject property was identified in the following supplemental databases:

- Historical Auto Stations – Zion Automotive was listed as a subject property occupant in 2005 and New England Automotive was listed as an occupant in 2008.
- FINDS (Facility Index System) – The subject property was listed under Registry ID 110043638141 in the US EPA Assessment Cleanup and Redevelopment Exchange System (ACRES), a federal database for Brownfields Grantees.

#### **4.1.5 Orphan Sites**

EDR identified 20 Orphan sites in the database search. Orphan sites are sites for which a geographic location cannot be identified because of insufficient address information.

Based on a review of the orphan sites list, it appears that none of the orphan sites are expected to present a concern to the subject property.

### **4.2 PHYSICAL SETTING**

#### **4.2.1 Priority Resources**

According to the MassDEP Massachusetts Contingency Plan (MCP) 21E Priority Resource Map, the subject property is not located within a Zone II area, Non-Potential Drinking Water Source Areas, Protected Open Space, Sole Source Aquifers, Public Water Supplies, Interim Wellhead Protection Areas, Medium and High-Yield Aquifers, Protected Open Space, Areas of Critical Environmental Concern, MassDEP Permitted Solid Waste Facilities, or Natural Heritage & Endangered Species Program (NHESP) Habitats and Certified Vernal Pools.

#### **4.2.2 Topography**

Woodard & Curran reviewed EDR-provided historic topographic maps dating from 1903 to 1979 as well as current United States Geological Survey (USGS) topographic maps for information on topography and elevation of the subject property. The subject property is located approximately 19 feet above mean sea level and slopes downward slightly to the north. East Cottage Street is depicted in the eight topographic maps that were reviewed.

#### **4.2.3 Geology**

According to the United States Department of Agriculture's (USDA) Soil Conservation Service, the primary soil type at the subject property is defined as urban land. The Bedrock Geologic Map of Massachusetts (Zen et al., 1983) indicates that the subsurface material is a Roxbury Conglomerate (conglomerate, sandstone, siltstone, argillite, and melaphyre).

Based on subsurface investigation at nearby properties, soil at the subject property likely includes fill material at shallow depths. The fill material may contain coal, cinders, and ash based upon historic fuel burning practices on the subject property and nearby properties as well as at least one historic fire that occurred on the subject property based on a review of City of Boston Inspectional Services files. The occurrence of coal, ash, and cinders in soil results in the likely presence of polycyclic aromatic hydrocarbons and metals in soil.

#### 4.2.4 Hydrology

The nearest body of water is Old Harbor, located approximately 1.5 miles to the east. Groundwater likely flows to the northeast based on the topography. Local groundwater flow may vary due to the presence of underground utilities such as sewers, storm drains, and heterogeneous subsurface soil conditions.

Although groundwater monitoring wells were installed on the subject property, groundwater levels were not reported in documentation reviewed by Woodard & Curran.

### 4.3 HISTORICAL USE INFORMATION

#### 4.3.1 Chain of Title

Limited historical ownership information was available from the Suffolk County Registry of Deeds and presented in Section 4.4.8. The City of Boston currently owns the subject property.

#### 4.3.2 Sanborn Fire Insurance Maps

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Woodard & Curran reviewed Sanborn fire insurance maps for the vicinity of the subject property dated 1899, 1931, 1950, 1964, 1989, 1990, 1993, 1994, 1995, 1996, 1998 and 2002. The maps are summarized in Table 4-1 below and are included in Appendix C.

**Table 4-1. Sanborn Fire Insurance Maps Review**

Date	Description
1899	A residential dwelling with two outbuildings is depicted along the east subject property boundary. The remaining portions of the subject property are depicted as undeveloped. Surrounding properties are depicted as residential. A railroad line is depicted running along the western subject property boundary.
1931	The Continental Baking Company is depicted. The dwelling depicted in the 1899 map along the eastern subject property boundary is absent. Rail lines are depicted entering the subject property along the western boundary.
1950	Similar to the 1931 map. However, a gasoline tank in the northwest corner and a store (detached from the main building) in the northeast corner are shown on the map. An addition to the main building is depicted along the eastern building exterior.
1964	Similar to the 1950 map. A gasoline tank is present in the northwest corner of the property.
1989	Similar to the 1964 map. However, the store previously depicted is absent and the subject property is not identified as The Continental Baking Company. A business name is not provided for the subject property. It appears that the subject property-building footprint represents the current building footprint. A gasoline tank is present in the northwest corner of the property.
1990, 1993-1996, 1998, 2002	Similar as the 1989 map. The gasoline tank is present in the northwest corner of the property.

### 4.3.3 Aerial Photographs

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Historical aerial photographs of the subject property and the surrounding area were requested from Environmental Data Resources, Inc. Nine photographs of the Dorchester area spanning from 1938 through 1995 were provided. The photos were reviewed and are summarized in Table 4-2 below and are included in Appendix C.

**Table 4-2. Historical Aerial Photograph Review**

Date	Description
1938	The subject property is developed with a building. East Cottage Street is present along the northern property boundary. A railroad line is shown along the western subject property boundary. Residential properties are shown in the vicinity of the subject property.
1946, 1955	Similar to the 1938 photo.
1960	Similar to the 1938 photo. However, a commercial property appears to be shown to the north, across East Cottage Street.
1969	Similar to the 1960 photo. However, properties abutting the subject property to the northeast appear to be commercial.
1978, 1980	Similar to the 1969 photo.
1985	Photo quality is poor. No description.
1995	Similar to the 1969 photo.

Woodard & Curran also reviewed aerial photographs dated 2008 available on Google Earth. The conditions visible on these photos with regards to the subject property are similar to the 1995 photo.

### 4.3.4 Topographic Maps

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Historical USGS topographic maps for the site and vicinity were obtained from EDR and were reviewed by Woodard & Curran. EDR-provided historic topographic maps dating from 1903 to 1979 as well as current United States Geological Survey (USGS) topographic maps for information on topography and elevation of the subject property. The subject property is located approximately 19 feet above mean sea level. East Cottage Street is depicted in the eight topographic maps reviewed. The subject property is shown to be relatively flat. Buildings are not depicted within the subject property boundaries.

### 4.3.5 City Directories

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Woodard and Curran reviewed the city directory summary provided by EDR for the years 1941, 1946, 1951, 1957, 1963, 1970, 1975, 1985, 1990, 1995, 2000, and 2005. The directories are summarized in Table 4-3 below, and are included in Appendix C.

**Table 4-3. Historical City Directory Review**

Date	Description
1941-1963	Continental Baking Co.
1970	Hardwick Stove Co, J Mandello & Co Inc., Orient Express Co., R&C Warehousing Co Inc.
1975	J Mandell & Co Inc.
1985	Environmental System, John E Roff, Maxwell Corraugate, Robert Bozozer, Rush Metal Plating, Amer Electropaire, Boston Chiseler, Box Boutique
1990	Box Boutique, Environmental System, Fort Apache South, J E Ross Contractor, Los Hispanos
1995	Box Boutique, Dooley Disposal, Los Hispanos, N. Brighton Iron, Vertec Corp.
2000	Cradock Woodworking, Feeney Publishing, Geotek Engineering Inc., Maxwell Box Co., Maxwell Flea Market, U Haul Co., UniiFirst, X L Research
2005	Atlantic Shipping, Gettin A Higher Education, Grealish Boxing Club Inc., Groom Humphreys Neighborhood Association, Maxwell Box Co., Maxwell Flea Market, Zion Automotive

Since 1985, various businesses and residential properties have occupied the adjacent properties. These historical listings are consistent with the observed current use of nearby properties.

## 4.4 LOCAL RECORDS REVIEW

### 4.4.1 Assessors Office

Assessor's information is referenced in Sections 2.1.2 and 4.3.1.

### 4.4.2 Fire Department

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Woodard & Curran contacted the Fire Prevention Division of the Boston Fire Department to request files pertaining to oil and hazardous material storage, use, or disposal at the subject property. According to Fire Prevention files, two 10,000-gallon #2 fuel oil USTs and one 1,000-gallon diesel fuel UST were removed from the subject property on October 25, 1994. A note indicates that Fire Inspector James Mahoney was present during the UST removals and that contamination of the subsurface was present. Additionally, the subject property is permitted to store 160 cubic feet of flammable gas, oxidizing gas, and inert gas and 20 gallons of propane.

Based on a review of the Response Action Outcome Statement and Immediate Response Action Completion Statement summarized in Section 3.1.1, the contamination observed by the Fire Inspector was reported to MassDEP



on October 28, 1994. Additional information about the response actions pertaining to the petroleum release is presented in Section 3.1.1.

#### **4.4.3 Board of Health**

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Woodard & Curran contacted the Boston Public Health Commission (BPHC) to request information pertaining to public health issues, complaints, or violations pertaining to the subject property. A letter dated April 12, 2010 from the BPHC indicates that no information pertaining to oil and hazardous materials was present within BPHC files.

#### **4.4.4 Inspectional Services**

Woodard & Curran conducted an on-line review of permits pertaining to potential oil and hazardous material storage, use, or disposal at the subject property. Except for correspondence regarding vehicle parking, no information pertaining to oil and hazardous materials was present within Inspectional Services on-line files.

Based on information contained on permit materials available in Inspectional Services, the following commercial activities have occurred on the property:

- Baking/bakery;
- Corrugated box company;
- Outdoor sale and display of used cars;
- Storage;
- Art studio;
- Office space;
- Distribution center;
- Indoor and outdoor flea market; and
- Garage.

#### **4.4.5 Boston City Archives**

As reported in a June 2010 Environmental Site Assessment Report of the subject property prepared by Woodard & Curran:

Woodard & Curran contacted Boston City Archives to request files pertaining to oil and hazardous material storage, use, or disposal at the subject property. The following is a summary of available information acquired during a file review:

- Gasoline Storage Permits
  - August 20, 1915- storage in a 300-gallon underground storage tank.
  - January 12, 1916- storage in tanks of nine automobiles.
  - September 25, 1919- storage in tanks of nine automobiles.
  - December 8, 1924- storage in a 1,000-gallon underground storage tank.
- #6 Oil Storage Permit

- February 3, 1919- fuel oil storage in a 10,000-gallon underground storage tank.
- Oxygen and Acetylene Permit- December 7, 1931- storage in two tanks.
- Boston License Committee Letter
  - August 12, 1966- Owner request to terminate licenses for the following storage due to non-use:
    - Gasoline in connection with parking garage
    - Acetylene and oxygen tanks
    - 9,000-gallon gasoline UST
    - 1,000-gallon gasoline UST
  - August 12, 1966- Owner request to extend license for the storage of fuel oil in a 10,000-gallon UST.

#### **4.4.6 Suffolk County Registry of Deeds**

An on-line file review was conducted for the subject property. A deed recorded August 24, 1979 indicates the subject property was transferred to Maxwell Products Corp. by Joseph and Pearl Mandell. Other various notices concerning land taking by the City of Boston were also available in on-line files. The City of Boston acquired the property by foreclosure on February 11, 2009 (Registered Land (Land Court) Book 436, Page 126).

## 5. PREVIOUS ENVIRONMENTAL REPORTS

Woodard & Curran reviewed the following reports:

*Cistar Associates, Inc., 1993, Environmental Site Assessment Report, 65 East Cottage Street, Dorchester, Massachusetts, 6 August 1993.*

According to Cistar, the site structure was constructed in about 1910 and was occupied by bakeries until about 1961. In 1965, Mr. Joseph Mandel acquired the property and operated a tile and rug distributor on the property until the mid 1970's. In 1976, Maxwell Products Corporation acquired the property and operated a cardboard box company on the premises. At the time of the report in August 1993, Maxwell Products still owned and operated at the property and also rented space to several tenants, including Box Boutique, Los Hispanos Garage (auto mechanics), John Ross Mechanical (storage for heating and plumbing business), and Dooley Disposal (storage and maintenance of garbage trucks).

During the 1993 site reconnaissance, floor drains were observed within the building at that time. The building was reportedly heated with an oil-fired boiler.

According to the site representative, three USTs (one 10,000-gallon fuel oil, one 1,000-gallon diesel, and one 10,000-gallon diesel) were present on the property. In addition, three tanks formerly used for syrup storage were present within the building.

Three exterior transformers were present at that time. Several 275-gallon ASTs and about twenty 55-gallon drums for storage of oil, waste oil, antifreeze, and hydraulic oil were also present.

*Cistar Associates, Inc., 1994, Report on Environmental Services Conducted on 65 East Cottage Street, Dorchester, Massachusetts, 9 August 1994.*

Cistar conducted a subsurface sampling program to determine if the site was impacted by oil or hazardous materials. Four monitoring wells previously installed in the late 1980's were evaluated (see Figure 4). Three groundwater samples were collected from the wells located closest to the assumed locations of USTs on the property in September 1993. No free product or sheen was observed on groundwater at the time of sampling. Groundwater samples were analyzed for volatile organic compounds, polycyclic aromatic hydrocarbons, and total petroleum hydrocarbons. One volatile organic compound (chloroform at a maximum concentration of 3.9 micrograms per liter) and total petroleum hydrocarbons (at a maximum concentration of 3.2 milligrams per liter) were detected in groundwater.

An underground storage tank reconnaissance was also conducted. At the time of the 1994 report, one 10,000-gallon fuel oil UST supplied the building's boiler. This tank was located near the southeast corner of the building. A 10,000-gallon diesel UST and 1,000-gallon diesel UST were located at the northwest corner of the building. Reportedly, these two diesel USTs were interconnected. A site plan accompanying this report also identified a fuel pump located inside the building near the diesel USTs.

*Rizzo Associates, Inc., 1995, Response Action Outcome Statement and Immediate Response Completion Statement, Maxwell Products Corporation, 65 East Cottage Street, Dorchester, Massachusetts, RTN No. 3-11782, February 1, 1995.*

Information obtained from this report is presented in Section 4.1.2.1. A site plan accompanying the Response Action Outcome Statement identified two gas pumps located inside the building near the former diesel USTs and one fuel pump on the building exterior near the former diesel USTs (Figure 4).

## 6. SITE RECONNAISSANCE

Mr. Brent Aigler and Mr. Robert McGrath of Woodard & Curran conducted the site reconnaissance on September 10, 2014. Photographs taken during the site reconnaissance are included in this report as Appendix A.

### 6.1 INTERVIEW

Woodard & Curran obtained information regarding the subject property from the City of Boston Department of Neighborhood Development (DND). We understand building demolition is planned for Fall 2014.

### 6.2 GENERAL OBSERVATIONS

Chain-linked fencing surrounds the subject property with gated entrances along East Cottage Street and Hillsboro Street. Signage posted on the fencing indicates that the subject property is owned by The City of Boston Department of Neighborhood Development.

Exterior portions of the property are asphalt paved.

Woodard & Curran observed seven loading docks into the building. Two loading docks are present along both the northern and southern exterior of the building. Three loading docks are present along the eastern exterior of the building. Former loading docks sealed with concrete blocks are also present.

At the time of the site reconnaissance, the subject property building was vacant. Based upon posted signage observed at the subject property, tenants formerly on the property include:

- Maxwell Corrugated Box Company
- Maxwell Art & Antique Gallery
- Maxwell Emporium
- Maxwell Flea Market
- Maxwell Freight Forwarding
- Maxwell Mini & MAXI Storage
- Maxwell Products Corporation
- Boston City Paper
- Atlantic Shipping Company, Inc.
- Grealish Boxing Club
- Unifirst Corporation
- Maxwell Estates Realty, Inc.
- Maxwell Flea Market
- Box Boutique Packaging Store

An aboveground storage tank, three 55-gallon drums (one empty, one partially filled with trash, and one partially filled with a liquid), and miscellaneous solid waste were observed within the building on the subject property. A gas pump formerly located on the exterior of the building (Figure 4) was not observed during the site reconnaissance. No other storage or use of oil and/or hazardous materials was observed from the limited exterior viewing locations.

Although floor drains were not specifically observed during the site reconnaissance in September 2014, based on previous documentation pertaining to the subject property, it is likely floor drains are present within the building.

### **6.3 HEATING SOURCE**

Natural gas fuels the building's heating system. A natural gas service line and meter assembly were observed on the exterior of the building near the building's southeast corner.

### **6.4 SOLID WASTE**

Solid waste was observed within the building on the subject property. Except for minor paper trash, no solid waste was observed in exterior areas on the subject property.

### **6.5 WASTEWATER**

Woodard & Curran did not observe evidence of the generation of industrial wastewater at the subject property. Sanitary wastewater is discharged to the municipal system.

### **6.6 STORMWATER DRAINAGE SYSTEM**

Storm water flows to catch basins within the paved surfaces on the subject property. The connection of these catch basins to the municipal storm water collection system is not known.

### **6.7 WATER SUPPLY**

The subject property is connected to the municipal water system.

### **6.8 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS**

Woodard & Curran did not observe hazardous substances and/or petroleum products stored on the exterior portions of the subject property.

During a walkover of the interior of the building on the subject property, Woodard & Curran observed one aboveground storage tank likely containing oil (Section 6.10) and three 55-gallon drums (one empty, one open top drum used for trash, and one partially containing liquid). No other hazardous substances and/or petroleum products were observed.

The building is currently heated via natural gas fired boiler. A former oil burning boiler is present in the basement.

### **6.9 UNDERGROUND STORAGE TANKS**

No current USTs were observed or reported to be located at the subject property. No USTs were registered for the subject property, according to environmental databases searched by EDR.

As presented in Sections 4.4.2, 4.4.5, and 5, USTs were formerly present on the subject property.

### **6.10 ABOVEGROUND STORAGE TANKS**

One current AST (estimated 300 gallons in size) was observed within the building at the subject property. A secondary containment structure (consisting of a blue plastic drum split in half) beneath the AST contained a small quantity (estimated less than five gallons) of oil at the time of the site reconnaissance.

No ASTs were registered for the subject property, according to environmental databases searched by EDR.

## **6.11 TRANSFORMERS**

One pole mounted transformer was observed on the northeast side of the subject property. No evidence of leakage from the transformer was observed. Exterior transformers were previously reported on the west side of the subject property (Figure 4).

## **6.12 ODORS**

No strong, pungent, or noxious odors were on the subject property.

## **6.13 POOLS OF LIQUID**

Pools of liquid were not observed on the subject property.

## **6.14 SOIL AND PAVEMENT STAINING**

No soil staining relating to a release of hazardous substances or petroleum products was observed at the subject property.

## **6.15 PITS, PONDS, OR LAGOONS**

No pits, ponds, or lagoons were observed at the subject property.

## **6.16 WELLS**

Four groundwater wells were previously installed on the subject property (Figure 4).

## **6.17 VAPOR ENCROACHMENT**

An assessment of vapor intrusion into structures on the subject property was conducted in general conformance with the Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (ASTM International 2600-10).

This guide presents a screening approach for evaluating the likelihood of migrating vapors volatilized from a contaminated source to encroach upon the subsurface of the subject property. The first tier of screening includes a review of known or suspect contaminated sites in the vicinity of the subject property. Specifically, this first tier screening approach evaluates the potential for petroleum impacted sites within 0.1 miles of the subject property and non-petroleum contaminated sites within 0.33 miles of the subject property to impact the subject property. If a known or suspect contaminated site is located within these search distances, an evaluation of hydraulic or physical barriers between the contaminated site and the subject property is conducted. The presence of preferential pathways, such as a utility corridor, is evaluated if a barrier is not present.

For this assessment, Woodard & Curran completed an initial Tier 1, non-invasive screen to evaluate the presence or absence of a potential vapor encroachment condition (VEC). Woodard & Curran concluded sites within the search distances that had achieved regulatory closure would not pose a vapor encroachment condition to the subject property.

Using the EDR report and observations collected during the site reconnaissance, Woodard & Curran evaluated database listings (i.e. State Hazardous Waste Sites, spill sites, RCRA generator sites, etc.) corresponding to properties that are located within 0.1 miles (petroleum releases) and 0.33 miles (non-petroleum releases) of the subject property (Section 4 and Tables 4.1 and 4-2).

### **Petroleum Releases**

Petroleum releases have been identified on the subject property and nearby properties (Section 4.1.2.1 and Section 5). The release on the subject property has achieved regulatory closure and nearby releases are hydraulically downgradient or cross gradient based on information reviewed pertaining to the nearby releases.

According to a review of the EDR database report, no active petroleum USTs are present within 0.1 mile of the subject property.

### **Non-Petroleum Release Sites**

Active non-petroleum release sites are present within 0.33 mile of the subject property based on environmental databases reviewed by Woodard & Curran. Woodard & Curran evaluated the location of these nearby sites, their regulatory status, the local subsurface conditions (generally consisting of fill and dense glacial till), and local hydrogeological conditions (generally a flat water table present in glacial deposits). Based on this evaluation, it is unlikely a non-petroleum release site located within 0.33 miles of the subject property would pose a vapor encroachment condition to the subject property.

### **Summary**

Based on the current understanding of petroleum and non-petroleum releases near the subject property as reported in documents reviewed for this Phase I ESA, there is no current risk of vapor intrusion on the subject property.

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## **7. INTERVIEWS**

### **7.1 INTERVIEW WITH OWNER**

Information obtained from the subject property owner's representative is presented in Sections 4 and 6.

### **7.2 INTERVIEW WITH SITE MANAGER**

Information obtained from the subject property owner's representative is presented in Sections 4 and 6.

### **7.3 INTERVIEWS WITH OCCUPANTS**

The subject property is unoccupied.

### **7.4 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS**

Interviews with local government officials are presented in Section 4.4.



## 8. FINDINGS AND CONCLUSIONS

Woodard & Curran was retained by the City of Boston DND (the “Client”) to conduct a Phase I Environmental Site Assessment of 65 East Cottage Street in Boston (Dorchester), Massachusetts (the “subject property”). Woodard & Curran conducted the Phase I ESA in general accordance with the ASTM “Standard Practice for Environmental Site Assessments E 1527-13” and the EPA’s AAI Final Rule (40 CFR Part 312). Woodard & Curran evaluated the subject property for evidence of the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of release into structures, soils, groundwater, surface water, or sediments on the subject property. These conditions are referred to in this report as RECs. The Phase I ESA included a site walkover, historical research, and a review of applicable local, state, and federal environmental records.

Woodard & Curran’s summary of the overall findings and conclusions are presented below.

### 8.1 FINDINGS

- The subject property consists of a 2.76-acre parcel of land located on the south side of East Cottage Street in Dorchester, Massachusetts. The subject property is presently developed with a multi-story, approximately 50,000-square foot, commercial style building. Based on information from historical research sources, the subject property building was constructed between 1899 and 1920 and has been occupied by various businesses, including bakeries and a box company. Historical information suggests that industrial tenants have also occupied the building.
- The City of Boston currently owns the subject property which was obtained thru tax foreclosure. The building on the subject property is currently vacant.
- Storage and use of hazardous substances and/or petroleum products has occurred at the subject property. City Archives information suggests that four USTs were permitted at the subject property between 1915 and 1966. This included a 300-gallon gasoline UST, 1,000-gallon gasoline UST, and 9,000-gallon gasoline UST and a 10,000-gallon fuel oil UST. Other small amounts of gasoline and acetylene were also permitted for storage.
- According to a previous Environmental Site Assessment Report prepared by Cistar Associates in August 1993, three USTs (one 10,000-gallon fuel oil, one 1,000-gallon diesel, and one 10,000-gallon diesel) were present on the property. In addition, three exterior transformers, several 275-gallon ASTs, and about twenty 55-gallon drums for storage of oil, waste oil, antifreeze, and hydraulic oil were also present. Floor drains were observed inside the building. A Site Plan prepared by Cistar Associates, Inc. also identified a fuel pump associated with the diesel USTs.
- In October 1994, three USTs (two 10,000-gallon #2 fuel oil USTs and one 1,000-gallon diesel fuel UST) were removed from the property according to Boston Fire Department records. Subsurface contamination was identified. The MassDEP was informed of a release of petroleum to the subsurface on October 28, 1994 and RTN 3-11782 was assigned to the release. An Immediate Response Action (IRA) was initiated and about 75 cubic yards of soil was excavated for off-site disposal. A Class A-2 Response Action Outcome Statement was submitted to MassDEP in February 1995 to achieve site closure. The subject property is also listed by MassDEP as a closed Spill Site for the release of magnesium in 1987.
- At the time of the site reconnaissance, one approximately 300-gallon aboveground storage tank (AST) and three 55-gallon drums (one empty, one containing trash, and one containing a small quantity of liquid) were observed inside the building. No other evidence of storage or use of oil and/or hazardous materials was

observed during an evaluation of the property. Oil leakage was observed from the AST. However, secondary containment on top of the concrete slab floor was present beneath the AST.

- Oil and/or hazardous material releases have been reported on nearby properties in addition to 65 East Cottage Street. However, based on distance, location, and/or regulatory status of these nearby sites, the environmental integrity of the subject property is not expected to be significantly impacted by these other sites.

## 8.2 CONCLUSIONS

Woodard & Curran has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527 of 65 East Cottage Street in Boston, Massachusetts. Any exceptions to, or deletions from, this practice are described in Sections 1.4 and 9 of this report. This assessment revealed the following in connection with the Subject Property:

- The previously identified release of petroleum on the subject property is a historical REC because the release has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority; and
- No evidence of RECs other than the historical REC described above in connection with the current and historical use of subject property, based on documents reviewed for this ESA.

Similar to other urban properties, fill material in the subsurface at the subject property likely contains coal, ash, and cinders which likely result in the presence of elevated concentrations of polycyclic aromatic hydrocarbons and metals in shallow soil at the subject property.

---

## 9. DATA GAPS

Woodard & Curran was unable to interview previous owners and occupants of the property as their contact information was neither provided nor encountered during Phase I research.

The aforementioned data gaps are anticipated to have little impact on the findings and conclusions of this report, as supporting information was found through other resources.

## 10. SIGNATURES

Robert W. McGrath, who is an Environmental Professional whose signature is affixed below, reviewed the Phase I ESA for 65 East Cottage Street in Boston, Massachusetts.

*I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.*



---

Robert W. McGrath  
Vice President  
Woodard & Curran

---

## 11. REFERENCES

Environmental Data Resources, Inc. (EDR) Radius Map with Geotrack Report. August 6, 2014.

EDR Sanborn Map Report. March 29, 2010.

EDR Aerial Photograph Print Service. March 29, 2010.

EDR Historical Topographic Maps Report. March 29, 2010.

EDR City Directory Abstract, April 5, 2010.

Boston Assessors Office, March 29, 2010.

Boston City Archives, March 31, 2010.

Boston Fire Department, March 29, 2010.

Boston Board of Health, March 29, 2010.

Boston Inspectional Services (on-line), August 13, 2014.

Suffolk County Registry of Deeds (on-line), August 13, 2014.

Massachusetts Water Resource Authority, March 31, 2010.

Scott, 1999, Priority Resources Map, Northeast DEP Region.

Woodard & Curran, 2012, Environmental Site Assessment Report, 65 East Cottage Street, June 2010.

## FIGURES





MN  $\star$  TN  
15 $\frac{1}{2}$ °

0 5 1 MILE  
0 1000 FEET 0 500 1000 METERS

Printed from TOPO! ©2000 Wildflower Productions (www.topo.com)

Base Map Source:  
TOPO!™ © 2000  
Wildflower Productions

LAT: 42°19'15.26"  
LONG: 71°04'03.40"

DES.BY:

DR.BY: MES

CK.BY: DC

65 East Cottage Street  
Dorchester, MA 02125

## FIGURE 1 SITE LOCUS

SCALE: AS SHOWN

JOB NO.: 223377.00

DATE: SEPTEMBER 2014

FILE NAME:

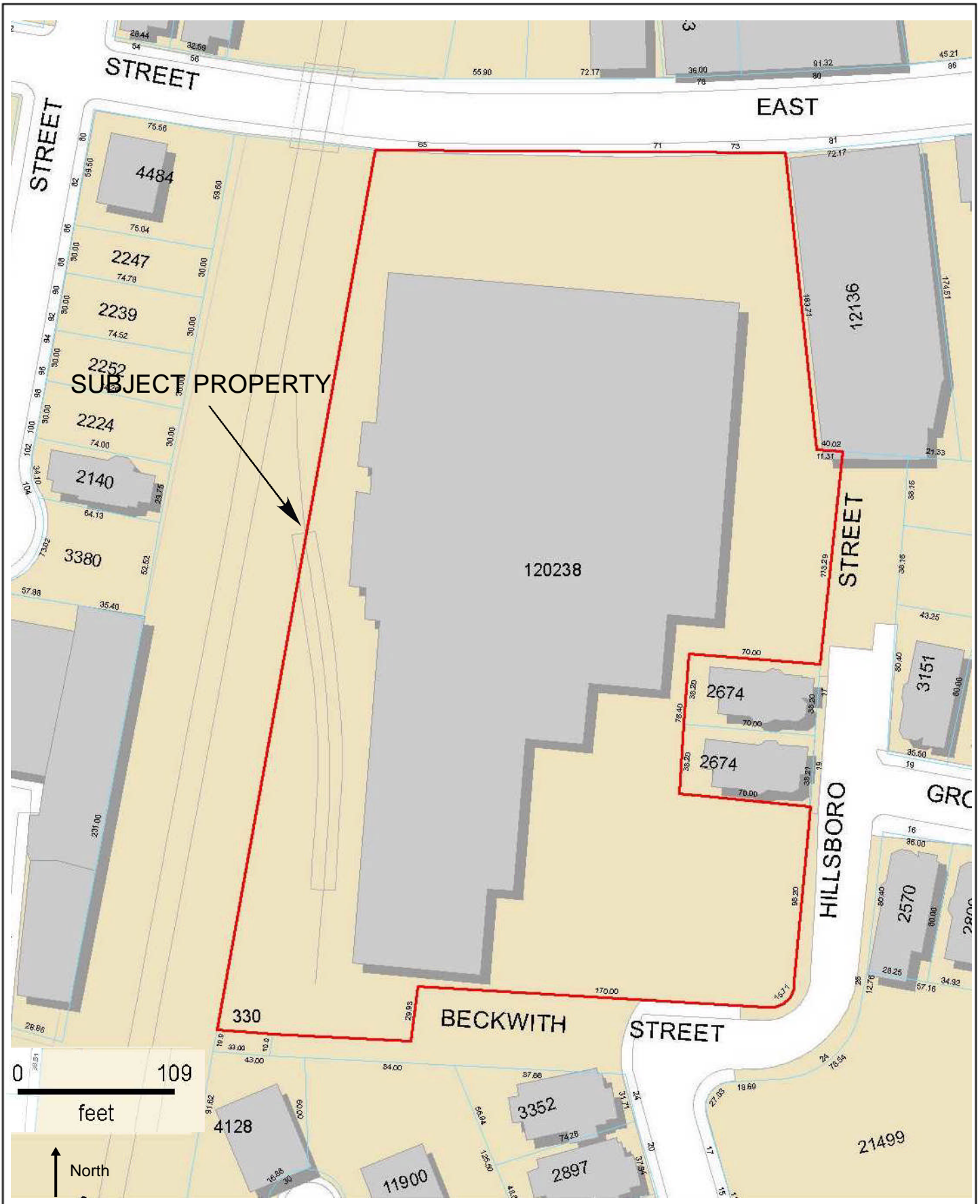



**COMMITMENT & INTEGRITY  
DRIVE RESULTS**

980 Washington St, Suite 325  
Dedham, MA 02026

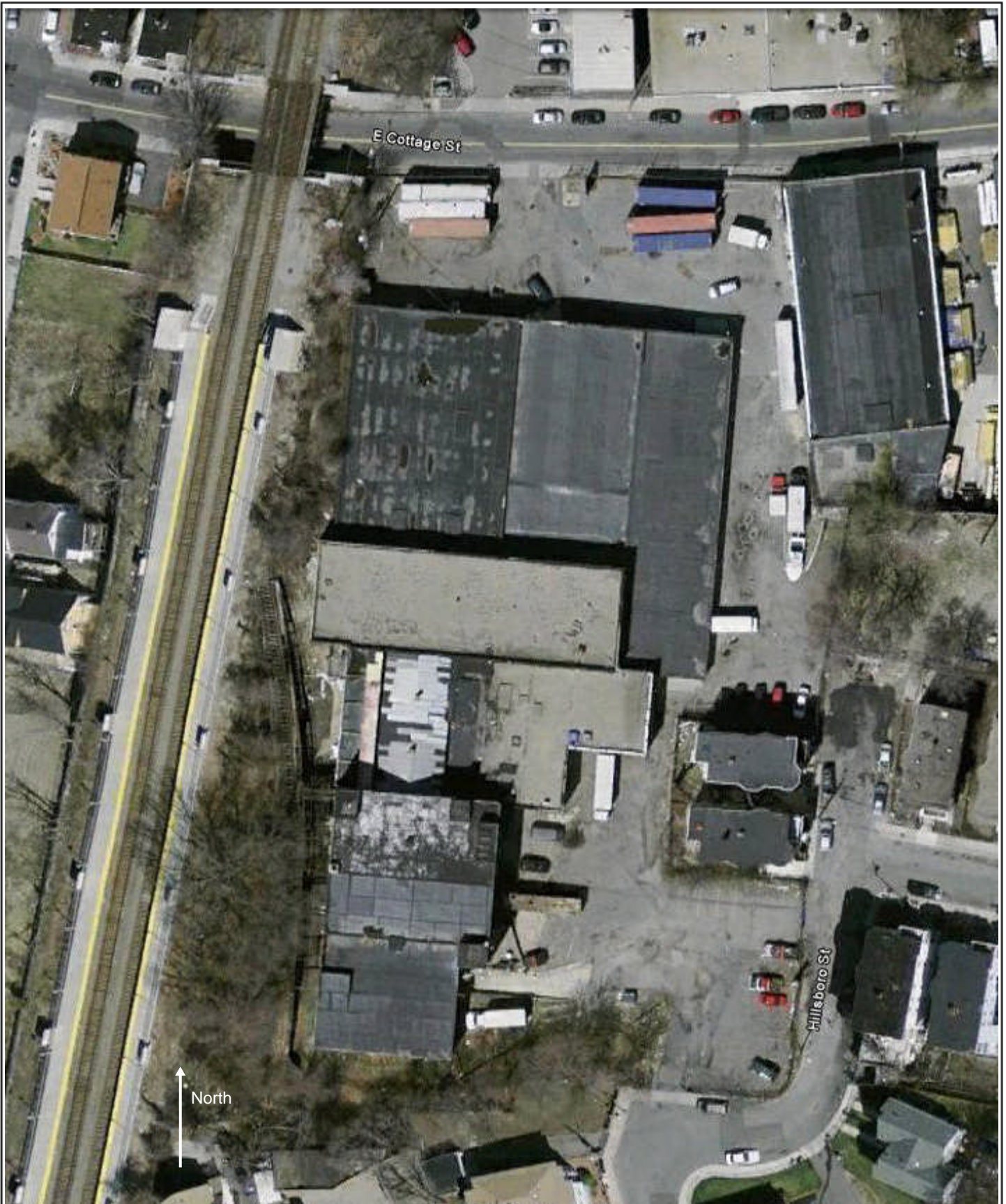
T: 800.446.5518





 <p>980 WASHINGTON STREET DEDHAM, MASSACHUSETTS 02026 781-251-0200 www.woodardcurran.com</p> <p>COMMITMENT &amp; INTEGRITY DRIVE RESULTS</p>	ASSESSORS MAP		65 EAST COTTAGE STREET DORCHESTER, MA		JOB NO.: 223377
					DATE: SEPT 2014
	DESIGNED BY: RM	CHECKED BY: RM	Source: City of Boston Assessing Dept	FIGURE 2	
	DRAWN BY:	SITEPLAN:			SCALE: AS SHOWN







980 WASHINGTON STREET  
DEDHAM, MASSACHUSETTS 02026  
781-251-0200 [www.woodardcurran.com](http://www.woodardcurran.com)

COMMITMENT & INTEGRITY DRIVE RESULTS

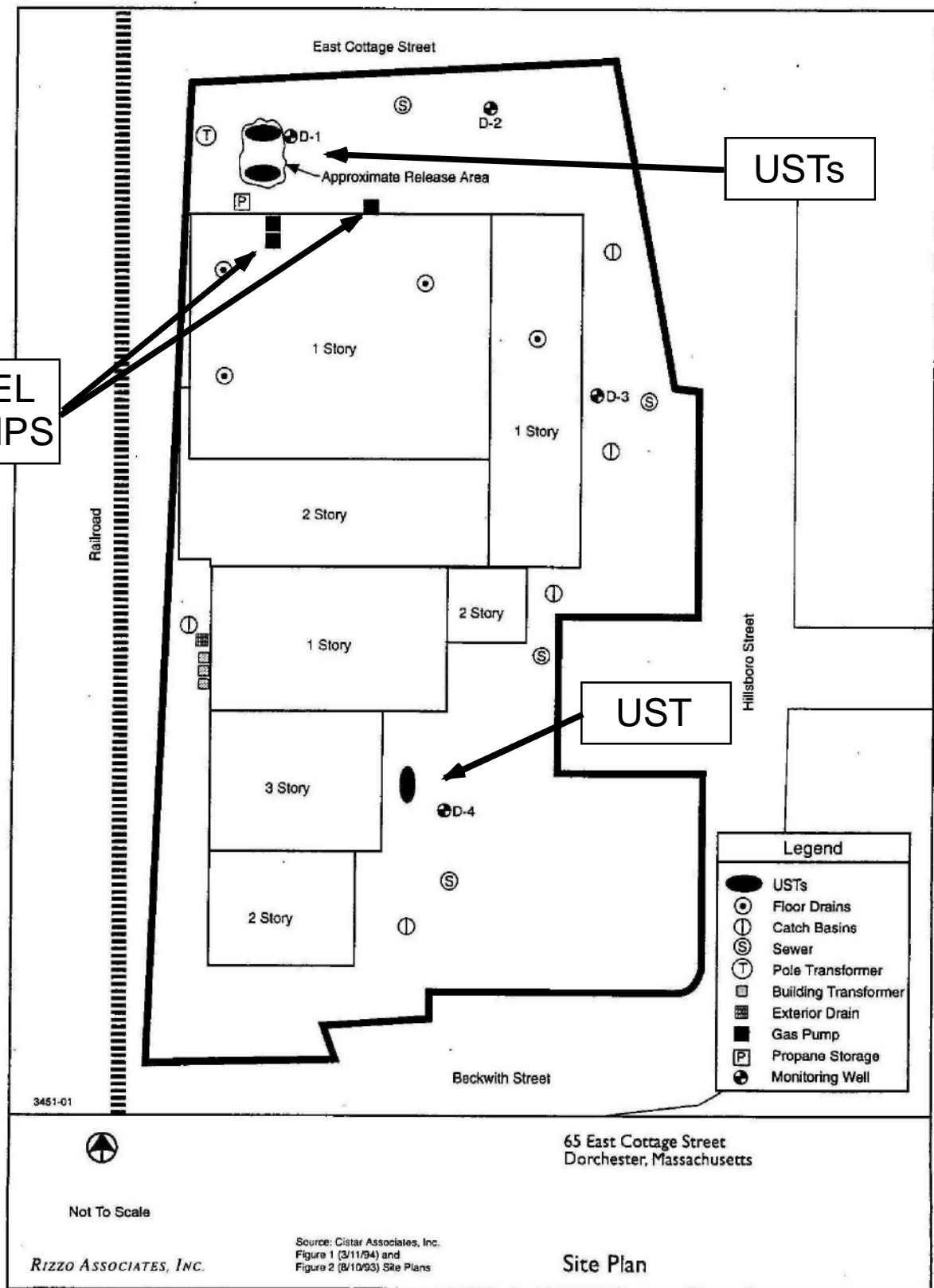
## AERIAL PHOTOGRAPH

DESIGNED BY: RM	CHECKED BY: RM
DRAWN BY:	SITEPLAN:

65 EAST COTTAGE STREET  
DORCHESTER, MA

Source: Google Earth

JOB NO.: 223377
DATE: SEPT 2014
SCALE: AS SHOWN
FIGURE 3



980 WASHINGTON STREET  
DEDHAM, MASSACHUSETTS 02026  
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COMMITMENT & INTEGRITY DRIVE RESULTS

## SITE PLAN

DESIGNED BY: RM  
DRAWN BY:

CHECKED BY: RM  
SITEPLAN:

65 EAST COTTAGE STREET  
DORCHESTER, MA

Source: Rizzo Associates, Inc.

JOB NO.: 223377  
DATE: SEPT 2014  
SCALE: AS SHOWN

FIGURE 4

## APPENDIX A: PHOTOGRAPHS





Photo Number: 1

View Direction: Looking south

Date: 9/10/14

Description: Subject Property



Photo Number: 2

View Direction: Looking North

Date: 9/10/14

Description: Subject Property – eastern portion



Photo Number: 3

View Direction: Looking southwest

Date: 9/10/14

Description: AST



Photo Number: 4

View Direction: Looking West

Date: 9/10/14

Description: 55-gallon drum